

3.8 TENNESSEE RIVER BASIN**CLINCH RIVER – SWAN ISLAND & BRIAR CREEKS****DESCRIPTION and EXTENT OF PROBLEM**

Many shoals are found in the first 40 miles of the Clinch River in Tennessee. The shallow waters surrounding these shoals provide habitat for a wide range of aquatic life, including many endangered mussel and fish species. The Nature Conservancy has ranked this reach of the Clinch River as having more imperiled species than anywhere else in North America, making it a unique natural resource.

WATERSHED NAME**SOURCES**

[none of these watersheds are 303(d) listed – the following text is based upon observations made by local water quality specialists]

Clinch River mainstem/shoals
Swan Island Creek
Briar Creek

agriculture
agriculture
agriculture

SUBWATERSHED ROTATIONAL PLAN

A three-mile reach of the Clinch River immediately upstream from and including Swan Island shoal is receiving 319 funding through an FY-99 UWA grant. This reach is predominantly agricultural in nature. As this FY-99 project progresses the project manager, Clinch-Powell RC&D Council, will be able to determine, with assistance from TDEC and the watershed technical team, which watershed should be addressed next with UWA funding. The next watershed to be addressed with UWA funds would likely be close to another endangered shoal.

At this time, agriculture is the only nonpoint source issue addressed in the watershed. Other nonpoint source sources will be corrected, if they are found in the watershed.

COOPERATING PARTNERS**Partners****Abbreviations**

City of Sneedville
Clinch-Powell RC&D Council
Hancock County Soil Conservation District
Hancock County government
Lincoln Memorial University
 Department of Biology
Local landowners
The Nature Conservancy-Virginia
 Clinch Valley Bioreserve
Tennessee Department of Agriculture
 Ag Resources Conservation Program
Tennessee Department of Environment & Conservation
 Division of Water Pollution Control
Tennessee Valley Authority

RC&D
SCD

LMU

TNC-VA
CVB

TDA-ARC

TDEC-WPC
TVA

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Resource Stewardship Watershed Team Program	
Tennessee Wildlife Resource Agency	TWRA
U.S. Department of Agriculture	
Natural Resources Conservation Service	USDA-NRCS
U.S. Department of Interior	USDI
Fish & Wildlife Service	F&WS
Geological Survey	USGS
U.T. Institute of Agriculture	UTIA
U.T.-County Technical Assistance Service	UT-CTAS

City of Sneedville

City officials will be encouraged to work with local landowners and contractors to at least investigate the possibilities of installing BMPs to reduce construction and urban-related runoff.

Clinch-Powell RC&D Council

The local RC&D Council will manage the project as well as BMP implementation, and public awareness. The RC&D's ability in these areas will be crucial to the generation of projects now and in the future.

Hancock County Soil Conservation District

The SCD is a partner in the effort to reduce nonpoint source pollution to local waters. The SCD, can provide a significant amount of financial assistance to local water quality efforts. Through its direct interaction with the local NRCS district conservationist, the SCD can also direct technical, as well as administrative, assistance to local water quality projects. The SCD also serves as a leader in the effort to increase water quality education of the local citizens and operators.

Hancock County government

As residential and commercial growth begins to escalate in the Clinch River watershed due to the impact of US 25E expansion, its officials will need to remain aware of and protect the existing Ag-related remediation work already in place. More importantly, government officials need to assume a leadership role in the nonpoint source effort by establishing water quality control measures for all construction sites and stormwater problem areas as growth continues.

LMU-Department of Biology

Lincoln Memorial University is a college located not far from the Clinch and Powell Rivers. LMUs biology department has been monitoring many of the receiving streams in the area and have volunteered to partner with TNC, TVA, TWRA, and USGS in an effort to provide the biological and chemical monitoring in the Upper Clinch River watershed project.

Local landowners

Landowners will be requested to participate in the implementation of BMPs by allowing the BMP to be placed on their property, contributing to the construction of the BMP through in-kind services, and maintaining the BMP for a pre-determined or indefinite

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period of time. These same landowners will also be required to allow others to visit the BMP once it has been fully constructed.

TNC-Virginia: Clinch Valley Bioreserve

TNC-Virginia staff is currently positioned in the Clinch River watershed to carry out such projects and could serve as an excellent partner. TNC's ability to purchase lands could be well served along riparian zones of the Upper Clinch River and its tributaries in an effort to improve the water quality. Staff of TNC-Virginia have volunteered to assist in the writing of the Quality Assurance Protection Plan for the Clinch River – Briar and Swan Island Creek watershed project. TNC, along with LMU, TVA, TWRA, and USGS will partner to produce the biological and chemical monitoring associated with the watershed project.

CURRENT 319 PROJECTS

FY-93	Clinch-Powell Rivers Interstate NPS W'shed Demo. Proj.	C-P RC&D
FY-95	Upper Clinch River Riparian Restoration & Erosion Control	TNC
FY-97	Remediation of Open Illegal Dumps in Clinch & Powell R.	C-P RC&D
FY-99(UWA)	Clinch R. Water Quality Restoration Project: Briar/Swan	C-P RC&D

CURRENT MONITORING & ASSESSMENT

TDEC-WPC five-year watershed management approach
 TDH-DLS pre- and post- BMP monitoring
 LMU monitoring
 TWRA monitoring
 TVA monitoring
 USGS monitoring

MEASURES OF SUCCESS

- UWA projects have been implemented in all 303(d) listed subwatersheds with a large portion of the required pollutant source sites having been addressed.
- Streambank stabilization BMPs have been sufficiently demonstrated to promote the projected implementation of these BMPs where needed throughout the watershed.
- Post BMP implementation monitoring results are indicating an overall improvement of the water quality of the streams directly affected by BMP implementation.

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MILESTONES

Long Term Goal 1.

Hold regularly scheduled meetings with stakeholders, to create new partnerships, strengthen existing partnerships and to foster greater trust, commitment and accountability.

- **Action:** Conduct an annual priority watershed partners meeting for project coordination.
Lead: TDA-NPS Program
Key Partners: TDEC-WPC; RC&D; TVA; SCDs; local governments
Year(s): 2001-2005
- **Action:** Develop a Watershed Restoration Action Strategy.
Lead: TDA-NPS Program
Key Partners: TDEC-WPC; USDA-NRCS; TDEC-DWS-GWMS
Year(s): 2001

Long Term Goal 3.

Restore all waters impaired by nonpoint sources that are listed on the 1998 303(d) List to the condition of fully supporting their designated uses by 2015, in cooperation with local, state and federal partners.

- **Action:** 100% of the needed agricultural BMPs will have been implemented in the Clinch River – Swan Island/Briar Creek subwatersheds.
Lead: RC&D, SCD
Key Partners: TDA-NPS Program; TVA; TNC
Year(s): 2005
- **Action:** 20% of the needed agricultural BMPs will have been implemented in the Clinch River watershed.
Lead: RC&D, SCD,
Key Partners: TDA-NPS Program; TVA; TNC
Year(s): 2010

Long Term Goal 5.

Improve the knowledge of stakeholders and citizens concerning the origins, magnitude, and prevention of nonpoint source pollution.

- **Action:** Develop at least two educational projects to educate the local citizens, landowners, and elected officials in the Clinch River- Island and Briar Creek subwatersheds.
Lead: TDA-NPS Program
Key Partner: RC&D; TNC; TVA
Year(s): 2005

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Long Term Goal 7.

Use the maximum allowable percentage of funding annually to assist partners with water quality monitoring and assessment, for the duration of the 319 program.

- **Action:** pre-BMP implementation monitoring will have been completed in all of the Clinch River subwatersheds.
Lead: TDEC-WPC; TDH-DLS
Key Partners: USGS; TVA; TWRA; TDA-NPS Program
Year(s): 2005

- **Action:** 100% of the Clinch River – Swan Island/Briar Creek subwatersheds will be trending towards fully supporting its designated uses.
Lead: RC&D, TVA, SCDs
Key Partners: USGS; TVA; TWRA; TDA-NPS Program
Year(s): 2005